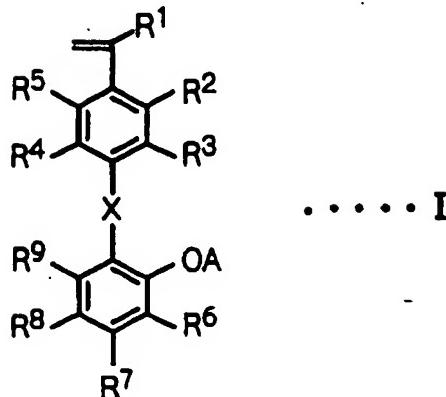


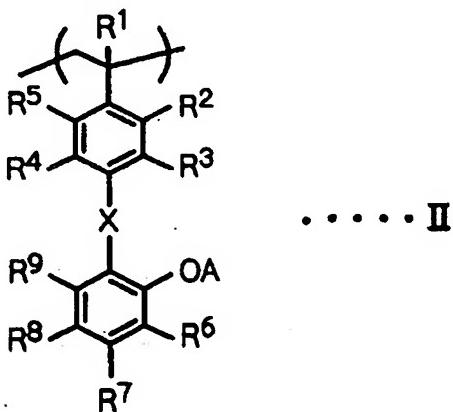
CLAIMS

1. A styrene derivative represented by general formula I:



wherein R¹ represents hydrogen atom or methyl group; R² to R⁹ independently represent hydrogen atom, halogen atom or alkyl group having 5 1 to 4 carbon atoms; X represents -CH=N-, -CONH-, -(CH₂)_n-CH=N- or -(CH₂)_n-CONH-, and the N atom in X is bonded to a carbon atom in the benzene ring having AO- at an o-position; A represents hydrogen atom or a group being decomposed by an acid; and n represents an integer of 1 to 3.

2. A styrene polymer comprising one or more repeating constitutional units represented by general formula II:



wherein R¹ represents hydrogen atom or methyl group; R² to R⁹
5 independently represents hydrogen atom, halogen atom or alkyl group
having 1 to 4 carbon atoms; X represents -CH=N-, -CONH-, -(CH₂)_n-CH=N-
or -(CH₂)_n-CONH-, and the N atom in X is bonded to a carbon atom in the
benzene ring having AO- at an o-position; A represents hydrogen atom or a
group being decomposed by an acid; and n represents an integer of 1 to 3.

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3. A styrene polymer prepared by polymerizing the styrene derivative as claimed in Claim 1 with a vinyl monomer which is copolymerizable with the styrene derivative.

4. The styrene polymer as claimed in Claim 2 or 3, having a weight average molecular weight of 2,000 to 200,000.

5. A photosensitive resin composition comprising the styrene polymer as claimed in any one of Claims 2 to 4 and a photosensitizer.

6. A positive photosensitive resin composition using the photosensitive resin composition as claimed in Claim 5; wherein the styrene polymer has a constitutional unit represented by general formula II in which A is hydrogen atom; comprising a diazonaphthoquinonesulfonate derivative as
5 the photosensitizer.

7. A positive photosensitive resin composition using the photosensitive resin composition as claimed in Claim 5; wherein the styrene polymer has an acid decomposable group; comprising a photoacid generator

as the photosensitizer.

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8. A negative photosensitive resin composition using the photosensitive resin composition as claimed in Claim 5; wherein the styrene polymer has an acid crosslinkable group; comprising a photoacid generator as the photosensitizer.

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9. The negative photosensitive resin composition as claimed in Claim 8, comprising a polyfunctional epoxy compound.

10. The negative photosensitive resin composition as claimed in Claim 8 or 9, comprising a phenol derivative or a polynuclear phenol derivative.

11. The negative photosensitive resin composition as claimed in any one of Claims 8 to 10, comprising a polyol.

12. A patterning method comprising at least: an application step applying the photosensitive resin composition as claimed in any one of Claims 5 to 11 on a processed substrate; a pre-bake step fixing the photosensitive resin composition on the processed substrate; an exposure step selectively exposing the photosensitive resin composition; a development step dissolving and removing the exposed or the unexposed area in the photosensitive resin composition to form a pattern; and a post-bake step curing the patterned photosensitive resin composition.

13. The patterning method as claimed in Claim 12; wherein the positive photosensitive resin composition as claimed in Claim 7 is used as the photosensitive resin composition; further comprising a bake-after-exposure step diffusing a generated acid by the exposure

5 between the exposure step and the development step; wherein the exposed area is dissolved and removed in the development step.

14. The patterning method as claimed in Claim 13; wherein the positive photosensitive resin composition as claimed in Claim 7 is used as the photosensitive resin composition; further comprising a post-exposure step between the development step and the post-bake step.

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15. The patterning method as claimed in Claim 12; wherein the negative photosensitive resin composition as claimed in any one of Claims 8 to 11 is used as the photosensitive resin composition; further comprising a bake-after-exposure step diffusing a generated acid by the exposure

5 between the exposure step and the development step; wherein the unexposed area is dissolved and removed in the development step.